Notes on some North American Mydaidae (Diptera)

By Maurice T. James, Colorado State College, Fort Collins.

Recently, I sent a small collection of Mydaidae to Dr. J. Bequaert for determination, and, after making identifications, pointing out a new species, and making some observations on the collection, he asked me to publish the results. I am greatly indebted to him for his generosity.

Nomoneura micheneri, new species.

&. Head black in ground color, clothed with dense, white, semi-appressed pile on the occipital orbits, the face, and to each side of the antennae, and with similar, but less dense and more erect, pile on the upper part of the front and on the vertex; this pile is somewhat longer than the combined length of the first and second antennal segments. Antennae black, except the bulbous fifth segment, which is orange-yellow; the first segment twice as long and thick as the second, clothed sparsely with long black and pale hairs mixed; third segment, slender, cylindrical, almost half the length of the entire antenna; the fourth segment approximately the length of the second; the fifth expanded bulblike, its greatest width being preapicad; the antennae elbowed at the apex of the third segment. Proboscis black, slender, extending approximately to the apex of the antennae.

Thorax black, shining, with dense conspicuous, white pile which covers the humeri and the following areas on the dorsum: the lateral margins, the anterior margin, except the median third, and a partial stripe on each side, extending backward almost to the suture and just outside the median third; this pile is appressed, except that on the humeri, which is semi-appressed; a similar area of semi-appressed pile occurs below each wing base, and there is a small tuft of it at the base of the scutellum. Posterior calli somewhat elevated. Halteres black. Legs black, the knees and tarsi brownish. Wings hyaline; the first posterior cell closed.

Abdomen black ventrally on the first six segments; the first and second entirely black, the third to sixth inclusively reddish dorsally, their lateral margins and narrow apices, however, black; genitalia mostly reddish. First segment with a considerable amount of rather long semi-appressed whitish pile; the second segment with a basal tuft of appressed whitish pile on each side; the remaining segments with inconspicuous black appressed pile on the disc and with conspicuous silvery tufts

at the posterior corners. Length, 10 mm.

§. Similar to the male, but the pile is much shorter and sparser, the dense covering of the head being especially reduced; on the abdomen the segments beyond the first are practically devoid of pile dorsally. The pile of the thoracic dorsum is similar to that of the male, but more reduced in area. Tibiae and genitalia brownish, the latter with four spines on each side. Antennae broken off at end of second segment.

Holotype &, allotype &, on one pin, taken in copulation, seven miles south of White Water, Riverside County, California, April 13, 1935 (C. D. Michener).

Of the species included in Johnson's key to Leptomydas, three evidently belong to Nomoneura, as defined by Curran in his "North American Diptera." These three, hirta Coq., concinna Coq., and venosa Loew, together with micheneri, are the representatives of this genus in the United States. Micheneri has a longer proboscis than the other species, and the coloration of the abdomen is quite different; the abdomen of venosa $\mathfrak P$ is entirely pale, while those of venosa $\mathfrak P$, hirta, and concinna, are banded with black and yellow.

Phyllomydas brusei Johnson. &, foothills west of La Porte, Larimer Co., Colorado, July 22, 1935 (M. T. James). On sage brush. This specimen was compared with the type by Dr. Bequaert, who informs me that it has been recorded only from the type locality, Galveston, Texas.

I have the following records for other Mydaidae, all determined by Dr. Bequaert.

Mydas maculiventris Westw. Miami, Florida, Aug. 6, 1934 (Frank N. Young).

M. MACULIVENTRIS var. INCISUS Macq. Miami, Florida, Aug. 9, 1934 (Young); Coconut Grove, Fla., June 18, 1934.

Opomydas carbonifer O. S. Lloyd, Jefferson County, Florida, Aug. 9, 1935 (G. Fairchild).

Nomoneura venosa Loew. Globe, Arizona (Duncan); Roggen, Colorado, Sept. 8, 1933 (M. T. James); between Trinidad and La Junta, Colorado, Aug. 8, 1933 (H. G. Rodeck, M. T. James). The latter specimen was taken, in rather good condition, from the radiator of our car.